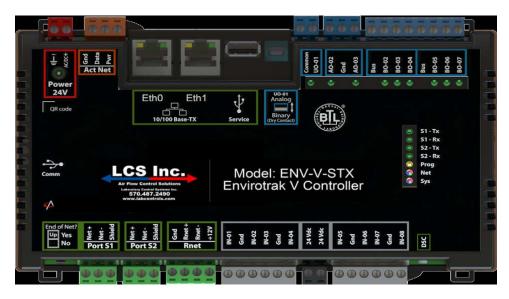
# ENVIROTRAK® V-STX CONTROLLER ENV-V-STX



## **GENERAL DESCRIPTION**

The Envirotrak<sup>TM</sup> V-STX is a high-performance, BACnet native direct digital controller (DDC). It provides speed, power, memory, and I/O flexibility in a compact package. The ENV-V-STX is targeted for fume hood, laboratory air flow, isolation and containment room control applications with small I/O point counts. Made with integration in mind, the ENV-V-STX can integrate with building automation systems via BACnet (IP or MSTP) or Modbus (IP or serial). The dual IP ports provide the ability to take advantage of a daisy-chain topology.

### **Key Features and Benefits**

#### **Performance / Hardware**

- Built-in End of Network switch for easy configuration on a BAS network
- ♦ Flexible, color-coded and easy to wire I/O
- Program and historical data stored in non-volitile memory, eliminating the need for batteries

#### **Communications Features:**

- 3 Configurable Communication Ports
  - Eth0 & Eth1: Daisy Chain 10/100 Base T Ethernet Ports for BACnet or Modbus communication, includes DHCP addressing
  - Port S1: EIA-485 for BACnet or Modbus (BAS or 3rd-party device)
  - Port S2: EIA-485 for BACnet or Modbus (3rd-party device)
- ♦ 3 Dedicated Communication Ports
  - Service Port: USB-A for technician access or EQT2 touchscreen connection
  - Rnet: For the ZS communicating sensors or EQT2 touchscreen connection
  - USB Comm Expansion Edge Connector Port: for comm expansion

LCS Inc.	Title: ENVIROTRAK® V-STX CONTROLLER		
Air Flow Control Solutions Laboratory Control Systems Incorporated 91 Quinton Road Scott Township, PA 18447 Tel: 570.487.2490 Fax: 570.487.2494 www.labcontrols.com	Model Number: ENV-V-STX		
	Drawing Number: ENV-V-STX DS	Date: 7/27/21	Rev. A

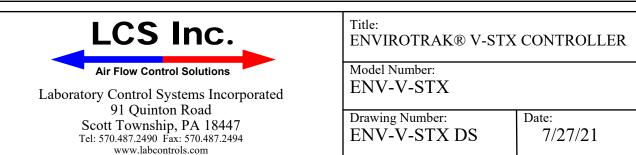
#### Service & Usability Features:

- Fully programmable using our powerful EIKON® graphical programming tool.
- Flexible site-specific archiving supported allowing for restore points to be created with a variety of ways to trigger the restore point and recover to that archive.
- Unique permissions framework provides protection for intellectual property (IP) while allowing for seamless connection of controllers to WebCTRL (Automated Logic) or i-Vu (Carrier) building automation systems.
- Existing control programs are easily converted and supported in the new hardware

## Specifications:

Power	24 Vac / 24 Vdc $\pm 10\%$ , 50-60 Hz, 55 VA / 20 W, single Class 2 source only
<b>Operating Range</b>	-40° to 158° F (-40° to 70° C); 10 to 95% relative humidity, non-condensing
<u>Universal Inputs (8)</u> (Software selectable)	8 Universal Inputs electronically configurable to any of the following types: Dry   Pulse Counting  Thermistor   0-10 Vdc @ 20mA 24VDC auxiliary sensor power (2): 24Vdc @ 100mA total current capacity
<u>Outputs (9)</u>	<ol> <li>Universal Output selectable to 0–10 Vdc (5 mA max), PWM, or Dry Contact Rated @24VAC 1Amp</li> <li>Analog Outputs 10Vdc @ 20mA max (D/A Resolution 12 bits)</li> <li>Digital Outputs (Dry Contact) Rated @24VAC 1 Amp. Configured normally open Status LED for all outputs</li> </ol>
<u>Communication Ports</u> BACnet Modbus	<ul> <li>Eth0 &amp; Eth1: Dual 10/100 BaseT Ethernet ports with built-in fail safe, supporting direct connection or daisy chain topology natively using BACnet/IP</li> <li>Port S1: High-speed EIA-485 port with End of Net switch. Configurable through browser.</li> <li>BACnet MS/TP or Modbus RTU network at 9.6, 19.2, 38.4, 57.6, 76.8, or 115.2 kbps (supports automatic baud-rate configuration)</li> <li>Port S2: Electrically isolated EIA-485 port. Software configurable and support for up to 50 third-party points</li> <li>BACnet MS/TP or Modbus RTU network at 9.6, 19.2, 38.4, 57.6, 76.8, or 115.2 kbps</li> <li>USB Service port: USB-A port for technician use and local EQT displays. Also supports connection of USB Flash drive for device recovery and USB Wireless Service Adapter</li> <li>Rnet port: Communicate with ZS communicating sensors and local EQT displays</li> <li>USB Expansion port: For communication expansion modules</li> </ul>
Real Time Clock	Real-time clock keeps track of time in the event of a power failure for up to 3 days
<b>Protection</b>	Fast acting, 3A, 250VAC, 5mm x 20mm glass fuse to protect controller power input
<u>Microprocessor /</u> <u>Memory</u>	32-bit ARM Cortex-A8, 600MHz, processor with multi-level cache memory / 16 GBs eMMC Flash memory and 256 MB DDR3 DRAM
<u>Compliance/Listing</u>	Conforms to the BACnet Advanced Application Controller (B-AAC) Standard Device, as defined in BACnet 135-2001 2012 Annex L and tested to Protocol Revision 14 <b>United States of America</b> : FCC compliant to Title CFR47, Chapter 1, Subchapter A, Part 15, Subpart B, Class A; UL Listed to UL 916, PAZX, Energy Management Equipment <b>Canada:</b> Industry Canada Compliant, ICES-003, Class A cUL Listed UL 916, PAZX&, Energy Management Equipment <b>Europe</b> : Mark EN50491-5-2:2009; Low Voltage Directive: 2014/35/EU RoHS Compliant: 2011/65/EU <b>Australia and New Zealand</b> : C-Tick Mark, AS/NZS 61000-6-3
<u>Physical</u>	DIN rail or Screw mounting. Minimum panel depth: 2.75 in. (7 cm) <b>Dimensions Overall:</b> 7.785 in. (19.77 cm) x 4.89 in. (12.43 cm), <b>Depth:</b> 2.00 in. (5.09 cm), <b>Weight:</b> 1.6 lb. (0.82 kg) <b>Screw Mounting:</b> 6.45 in. (16.38 cm), 4.5 in. (11.43 cm)

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Rev. A